DIVISION OF THE HUMANITIES AND SOCIAL SCIENCES
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA 91125

COMPARING ABSENTEE AND PRECINCT VOTERS: VOTING ON DIRECT LEGISLATION

Jeffrey A. Dubin

Gretchen A. Kalsow

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Abstract

This paper addresses issues related to how the absentee voter actually casts their ballot on propositions. If the liberalization of absentee laws changed either the composition or behavior of the electorate then the outcome of the election may be affected.

This paper tests whether the electoral behavior of absentee and precinct voters differs in regards to voting on propositions. The analysis is based on sample of actual absentee and precinct voter ballots drawn from the approximately three million ballots cast in Los Angeles county for the 1992 general election. The analysis uses a nested model of voter participation and is estimated using the weighted exogenous sampling maximum likelihood method.

We find that precinct and absentee voters do differ on both the propositions they cast votes on, and in their propensity to vote "Yes" for a proposition. For example, absentees appear to vote on fewer bonds and initiatives than do precinct voters. They also vote on fewer propositions dealing with state taxes, food taxes, and property taxes. In addition, given that a voter casts a valid vote, the propensity for absentee voters to vote "Yes" is higher on initiatives and propositions related to education, welfare, and health care than it is for precinct voters.

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1 Introduction

It has been asserted that absentee voters have been the decisive group in several recent state-wide candidate elections. While campaign organizers in California have demonstrated their prowess at attracting the absentee vote for candidates, they haven't actively sought absentee votes for propositions. Proposition outcomes are potentially affected in at least three different ways by the recent increase in absentee voting. First, an interest group supporting a proposition could have it's own absentee voter drive, or coordinate such a drive with a major candidate. Although this has not happened yet, it is surely one of next moves being considered by proposition supporters. Second, to the extent that candidate absentee drives are successful, they may alter the composition of the electorate.

A third influence may result from absentees modifying their voting behavior, as compared to their behavior as precinct voters. Hamilton (1988, p. 860) lists several advantages of all-mail elections, including "an increase in the integrity of elections as a result of more time for voters to consider issues before casting their ballots." If Hamilton is correct, then the additional time spent by absentee voters considering how to cast their ballots may result in absentees voting on different measures and casting their votes differently than if they had voted at the precinct. Thus the pattern of votes cast and the propensity to vote "Yes" may differ when voters switch from voting at the precinct to voting at home.

In this paper we examine the voting behavior of absentee voters, as compared to precinct voters, in voting on direct legislation. Specifically, we examine differences in proposition voting behavior by analyzing the effect of proposition form (bond, legislative

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proposal, or initiative) and proposition content.[1] In our model of proposition voting a voter first determines whether or not the issue is important, and if so, how to cast their vote on the specific proposition. This model is depicted in Figure 1.

[Figure 1 Here]

The first decision we analyze empirically is the decision to cast a vote on a proposition. We control for a voter's demographics and socioeconomic characteristics while examining the effect of proposition form and content on the probability of casting a vote. Next we analyze the propensity to vote "Yes" conditional on voting, again investigating the impact of form and content.

Because little is known about absentee voters from prior studies of voter behavior, the focus of this paper is on discovering the rudimentary differences in the ballots cast by absentee and precinct voters. Mueller's (1969) pioneering study of voter fatigue and drop-off employed a sample of ballots that was primarily from absentee voters, and concluded that voters do indeed drop-off between candidate races and propositions.

To date, we have reached three preliminary conclusions regarding absentee voting in California. First, in more recent California elections (1988 through 1992) absentee voters in Los Angeles county voted on approximately five percent fewer propositions than did their precinct voting counterparts. Second, Dubin and Kalsow (1995) find that absentee voting is a substitute activity for precinct voting in general elections, although they are not perfect substitutes. This implies that the composition of the electorate may have changed. In addition, Dubin and Kalsow find that the pool of absentee voters is not random. The propensity to vote absentee is positively related to being over 64 years old and to the presence of young children in the home. Absentee voting is also negatively related to education, being unemployed, and homeownership.

More generally, we know that voters respond differently to propositions of varying lengths, complexity, content, and form.[2] This paper addresses the question of whether the drop-off that Mueller found was an artifact of his use of absentee ballots, or if the pattern of votes on propositions is similar for absentee and precinct voters. We analyze the voting behavior of precinct and absentee voters in terms of their propensity to vote on particular propositions and their propensity to vote "Yes," given the form and content of the proposition.

The next section of this paper outlines the theory of proposition voting. Section 3 briefly describes the data sources and independent variables employed. Section 4 discusses

[1]Differences in behavior related to proposition form and content may be related to the phenomenon known as roll-off and voter fatigue.. See Dubin and Kalsow (1994a) for additional information on these topics.

[2]Refer to Dubin and Kalsow (1994a) for additional information regarding an analysis of ballot roll-off and voter fatigue.

the econometric approach used to estimate our model of proposition voting and section 5 highlights prior results regarding proposition voting behavior that are applicable to our model. Section 6 describes the hypotheses that will be tested. The last two sections present the results, their implications on future policy, and directions for further research.

2 Theory of Proposition Voting

Relatively few studies of proposition voting have been reported. Price (1975) finds that Western states are more likely to provide for the use of initiatives, and their electorate votes on initiatives with greater frequency as compared with the behavior in Eastern states. Owens and Wade (1986) find that the probability that a proposition passes and the inflation adjusted campaign related expenditures have both been stable over time.[3] Zisk (1987) examines the decrease in participation on propositions compared to top candidate races by using aggregate election results and survey data from four states over five years. She finds that a voter's decision to cast a vote, vote negatively, or abstain is unrelated to proposition position. Zisk also finds support for increased levels of voting on citizen initiated propositions over legislative proposals.

In addition to proposition voting, ballot roll-off and voter fatigue theories are relevant to our analysis. Burnham (1965) determines that roll-off and split-ticket voting have increased from 1907 to 1962. Mueller (1969) attributes roll-off to campaign spending and voting behavior on surrounding propositions. His analysis also concludes that the number of negative votes increases with ballot position.

Magleby's (1984) book, *Direct Legislation*, explores many aspects of proposition voting and reports the drop-off percentages for California propositions from 1970 to 1982. He finds evidence that longer ballots impact drop-off, but his results were not consistent across time. Magleby also reports that nonwhite voters vote on fewer issues, as did older voters, blue collar voters, and low income voters. In addition, he finds that education is positively correlated with ballot completion. These results are consistent with those of Clubb and Traugott (1972). They confirm that white, educated, higher income, higher social class individuals who read the newspaper and are more interested in politics vote more often on referenda. Magleby also reports that proposition readability affects participation level, and that voters have an increased propensity to vote on initiatives over legislative proposals.

More recent work has been published by Vanderleeuw and Engstrom (1987), Darcy and Schneider (1989), and Bowler, Donovan and Happ (1992). Vanderleeuw and Engstrom report that African-Americans roll-off at faster rates than whites, even when controlling for age and education. Darcy and Schneider find that confusing and complex ballots lead to more roll-off. Bowler, Donovan, and Happ demonstrate that aggregate

[3]See also the studies of Wolfinger and Greenstein (1968) and Hamilton (1970) on the repeal of the Fair Housing Act in California.

proposition voting is related to the total campaign spending, type of proposition, source of the proposition, length, and turnout.[4]

Using Los Angeles county data Dubin and Kalsow (1994a) find evidence of both roll-off and ballot fatigue. *Ceteris paribus*, the probability of a voter abstaining increases further into the ballot, as does the propensity to cast a "No" vote. In addition, they find that both the form and the content of a proposition affect the propensity to vote and the propensity to vote "Yes" on a given proposition.

3 Data Sources and Independent Variables

The primary data source for this analysis are the ballot image files prepared by the California Secretary of State. These files contain one record for each ballot cast in the 1992 general election in Los Angeles county. A secondary data source is the decennial book on congressional districts published by Congressional Quarterly. It provides the demographic information for each congressional district. In addition, the California Secretary of State publishes the *Statement of Vote* (SOV) which provides registration and vote totals by precinct. These totals are used as a validation of the ballot image decoding process described below. The Secretary of State also provides an election ballot book which contains proposition-specific information, such as the official ballot description.

3.1 Ballot Images

Our primary data source comes from a sample of the 2,831,077 actual punch-card ballots cast in Los Angeles county in the 1992 general election. As the voter turns a page in the ballot book, they also move one column to the right on the punch-card, perforating the card in a specified box to indicate their vote. The evening of the election the cards are collected and transported to a central location where a machine reads the cards. As a by-product of tabulating the votes, a binary image of each ballot is written to a magnetic tape. This tape, after extensive manipulation, provides the data for this analysis.

There are several factors which complicate the decoding of ballots from the ballot image tape.[5] The first is that the ballot image tape is not used for official purposes so its creation is often an *ad hoc* procedure. For example, if some ballots within a processing group are misfed into the reader, the entire group may be re-read. Our procedures were designed to identify and eliminate such duplications. Another complication comes from the use of ballot groups. Each unique combination of contests and rotation sequences constitutes a ballot group.[6] An additional complication is that up to four card readers

[4]Matsusaka (1992) considers the decision by elected officials to either resolve issues or place them before the people, and if they opt for a popular vote on an issue, why some voters then abstain.

[5]See Dubin and Gerber (1992) for additional information on decoding these ballot images.

[6]There were 235 ballot groups in the 1992 general election. The candidates are "rotated" to minimize any order effects. In this way any advantage to being first on the list of candidates is distributed among

can be processing ballots simultaneously, and the ballot images are written to the same tape. This means that the ballot images on the tape must be "unshuffled" into distinct precincts prior to processing.

The last step of the decoding process is to match a "correction" tape to the original precinct ballot images, and compare vote counts to the SOV. The completeness and accuracy of this correction tape, and hence the match rate to the SOV, varies by election.[7]

3.2 Sampling from the Data

Since the actual 1992 general election had almost three million ballots, a sample was selected for econometric analysis. The sampling process selects ballots from each precinct whose ballot count matches that found in the SOV, and from each absentee ballot group whose ballot count matches that found in the SOV. The number of ballots selected from each precinct is proportionate to the total number of ballots cast from that precinct. A 0.21 percent sample of the valid precinct ballots is combined with a 1.29 percent over-sample of the absentee ballots to create a dataset of 5,028 precinct ballots and 5,009 absentee ballots. This sample of ballots is then pooled across the thirteen propositions appearing on the ballot, resulting in a total of 130,481 observations.[8]

3.3 Dependent Variables

The dependent variable for the vote decision is based on the coded response of the subject; voting either "yes" or "no" on a specific proposition sets the "vote" indicator to "1," while abstaining or invalidating the vote sets the "vote" indicator to "0." The dependent variable for the outcome decision is set to "1" if the voter votes "yes," and "0" otherwise, as long as the voter casts a valid vote for that proposition.

3.4 Explanatory Factors

The independent variables are one of two types: proposition-specific characteristics (Z_j for proposition j), or individual-specific variables, i.e., demographics, (W_i for individual i), as reported in Table 1. The proposition-specific factors include the proposition form,

all the candidates. Each ballot group locates a particular contest in a different punch position, depending on both the number of previous contests and on the number of candidates in the previous contests.

[7]For the 1992 general election we were able to match 99.5 percent of precincts exactly when comparing total vote counts as reported in the SOV to the number of ballot images determined from the ballot image tapes.

[8]The mean sample and Los Angeles county voting percentages are 86.9 percent and 88.1 percent, respectively. The mean frequencies of voting "Yes" on a proposition in the sample is 46.2 percent, and 45.8 percent in Los Angeles county. The completion rate across all propositions for absentee voters is 84.9 percent, and 89.6 percent for precinct voters.

content, and characteristics of the official ballot description. Individual-specific variables are matched to each ballot image using an identifier for the voter's congressional district that is located on the ballot image. This is necessary since individual level demographic information is, of course, not contained on the ballot image data.

The proposition-specific variables included in the analysis are the proposition form, content, reading ease score, and word count. The proposition form conveys information on the author or source of the proposition, as well as its relative ballot position. Bonds appear first on the ballot, then legislative proposals, and last are the initiatives.[9] Both the bonds and the legislative proposals are placed on the ballot by the state legislature, while initiatives qualify through a process involving a petition requiring an appropriate number of registered voter signatures.[10] We group the propositions into major content areas: humanitarian (education, welfare, health, and physician-assisted death), taxes (food taxes, property taxes, and state taxes) and "other" (term limits, toll roads, rail transit, state government). The reading ease score is the Flesch score, as described in Magleby (1984). It serves as a proxy for the comprehension of the proposition's impact, while the number of English words appearing in the official ballot description is a proxy for the patience and time required to muddle through the proposition's description.

[Table 1 Here]

The individual-specific variables include race, socioeconomic, social connectedness, and party affiliation variables. The race variable in our model is the percentage of the population that report African-American on the census.[11] The socioeconomic factors considered are the median family income (in 0000's) and the percentage of adults over age 25 that did not complete high school. The social connectedness factors (Teixeira (1992)) include the percentage of households residing in owner-occupied housing units. We measure the conservativeness of the congressional district using the percentage of registered voters that are Republican. Finally, we employ an indicator for whether the voter cast an absentee ballot or not.

[9]Since California law stipulates the order of propositions by form on the ballot, we are unable to identify both the form and proposition position in our model. Because bonds appear first the indicator for bonds may also be viewed as an indicator for the "beginning" of the propositions. Similarly, the legislative proposal and initiative indicators could be construed as the "middle" and "end" of the propositions, respectively. This problem would exist in any analysis using a single election or series of elections where the legislature passed the bond bill before the required date. One notable exception to the ordering of propositions occurred in the 1990 general election when the legislature failed to pass the bond bill in a timely fashion, which resulted in bonds being placed last on the ballot.

[10]Refer to Fitzgerald (1980) for additional information on qualifying a proposition for the ballot in California.

[11]Los Angeles county is racially and ethnically diverse, with large populations of Asian-Americans and Latino-Americans. Our models were tested with factors reflecting the percentage of Asian-Americans and Latino-Americans and neither factor was found to be statistically significant.

4 Estimation Techniques

In this section we develop our model of proposition voting using a discrete choice econometric framework. Since, by design, our sample of the ballots cast in the 1992 general election has over-sampled absentee voters, we employ a weighted exogenous maximum likelihood estimator.

4.1 Discrete-Choice Model of Proposition Voting

There are two decisions required of a voter in the voting booth—whether to cast a vote on a particular contest or not, and declaring their position on that contest. Refer to Figure 1. Let $i = 1, \ldots, I$, represent the individuals, $j = 1, \ldots, J$, the propositions. Further, let $k = 0, 1$ and $m = 0, 1$ represent the choices made by an individual voter. In the first decision $k = 1$ represents the decision to vote on a specific proposition, and $k = 0$ represents the decision to abstain. The act of voting "Yes" on a proposition is represented by $m = 1$, and "No" by $m = 0$. Recall that W_i represents the individual-specific factors and Z_j the proposition related factors.

Let V_k represent the utility an individual voter receives from voting on a proposition. If the errors are independent, identically distributed, and from an extreme value distribution, then McFadden (1981) demonstrates that the probability of voting by the ith individual on the jth proposition is given by:

$$\mathrm{P}_1^{ij} = \frac{e^{V_1(W_i, Z_j)}}{e^{V_1(W_i, Z_j)} + e^{V_0(W_i, Z_j)}}, \tag{1}$$

where $\mathrm{P}_1^{ij} \equiv \mathrm{P}_{(k=1)}^{ij}$. We assume that $V_k(W_i, Z_j)$ is linear in its parameters, with $V_k(W_i, Z_j) = \alpha_k' W_i + \beta_k' Z_j$, where α_k and β_k are the weights given to factors W_i and Z_j, respectively. Then,

$$\mathrm{P}_1^{ij} = \frac{e^{\alpha_1' W_i + \beta_1' Z_j}}{e^{\alpha_1' W_i + \beta_1' Z_j} + e^{\alpha_0' W_i + \beta_0' Z_j}}. \tag{2}$$

We impose the normalization, $\alpha_0 = \beta_0 = 0$, and let $\alpha = \alpha_1$ and $\beta = \beta_1$ so that equation (2) may be rewritten:

$$\mathrm{P}_1^{ij} = \frac{1}{1 + e^{-[\alpha' W_i + \beta' Z_j]}}. \tag{3}$$

Similarly, if U_m denotes the utility of voting "Yes" on a proposition, then the conditional probability of voting "Yes" given that a vote is cast is given by:

$$\mathrm{P}_{(m=1|k=1)}^{ij} = \frac{1}{1 + e^{-[\delta' W_i + \gamma' Z_j]}} \tag{4}$$

where we impose the normalizations $\delta_0 = \gamma_0 = 0$, $\delta = \delta_1$, $\gamma = \gamma_1$, and where

$$U_{(m|k=1)}(W_i, Z_j) = \delta_m' W_i + \gamma_m' Z_j.$$

4.2 Weighting

Since our sample of absentee and precinct voters is not random, it is necessary to reweight the data in the log-likelihood function to compensate. For a random sample, the sample average log-likelihood converges to

$$\begin{aligned} \mathrm{E}[L(y;\theta)] &= \mathrm{E}[\mathrm{E}(L(y;\theta)|x)] \\ &= \int \mathrm{E}[L(y;\theta)|x]r(x)dx \end{aligned} \tag{5}$$

where $r(x)$ is the distribution of x in the population, and $L(y;\theta)$ is the sample average log-likelihood function.

When the observations come from a non-random sample with probability density $s(x)$, the sample average log-likelihood converges to

$$\int \mathrm{E}[L(y;\theta)|x]s(x)dx. \tag{6}$$

Optimization of equation (6) with respect to θ will not in general lead to the true parameter θ_0, which is obtained when optimization is done with respect to equation (5).

When sampling weights are observed, it is possible to reweight the sample log-likelihood using the weights $w(x) = r(x)/s(x)$. The weighted log-likelihood $w(x)L(y;\theta)$ converges to

$$\int \mathrm{E}[L(y;\theta)w(x)|x]s(x)dx = \mathrm{E}[L(y;\theta)].$$

The weighting $w(x)$ corrects for the non-random nature of the original sample. Let P_i^S be the probability of precinct voting in the sample for congressional district i and let $(1-P_i^S)$ be the probability of absentee voting in the sample. Let Q_{ij}^S be the probability of voting "Yes" in the sample for congressional district i on initiative j, and let $(1-Q_{ij}^S)$ be the corresponding probability of voting "No" in the sample. Let P_i^A and Q_{ij}^A denote the true probabilities of precinct-voting and yes-voting in the population. Then $R(x_i) = P_i^A Q_{ij}^A$ and $S(x_i) = P_i^S Q_{ij}^S$ are the unconditional sample and population probabilities for precinct and yes-voting respectively. The weighting to correct for non-random sampling sets

$$w(x_i) = \frac{P_i^A Q_{ij}^A}{P_i^S Q_{ij}^S}$$

for observations that precinct vote "Yes." Similar weights are calculated and applied for other combinations of precinct/absentee voting and voting yes/no.[12] Estimation is performed within the *Statistical Software Tools* econometric package (Dubin and Rivers (1988)).

[12]Refer to Manski and Lerman (1977) for additional details regarding the weighted exogenous sampling maximum likelihood method.

5 Factors Affecting Voting Behavior

Prior studies of proposition voting suggest that there is a relationship between voting behavior and both proposition-specific and individual-specific variables, independent of the effects of voting absentee or voting at the precinct. The anticipated impact of the proposition-specific variables are described first. Although the individual-specific variables are not the focus of this paper, a brief discussion of their impact on voting and voting "Yes" is also given below.

The proposition-specific variables analyzed in previous studies include the proposition form, content, reading ease, and number of English words in the official ballot description. Voters tend to vote more often on bonds and initiatives than legislative proposals (Dubin and Kalsow (1994a)). Because many hundreds of thousands of registered voters must sign the petition for an initiative, there tends to be wider pre-election visibility of initiatives as compared to legislative proposals.[13] Bonds also tend to reflect "pocketbook voting" theories since the issuance of bonds has an economic impact on each voter. In addition, as compared to legislative proposals, bonds and initiatives receive more "Yes" votes. Legislative proposals may receive higher numbers of "No" votes simply because of the reason the legislature placed those issues on the ballot. Although some legislative proposals are constitutional amendments that are required to be put before the people, many of the legislative proposals are extremely controversial issues. In fact, in some cases the legislature determines that it would cost them more political capital to cast a public vote in the legislature on the issue than it would to turn the issue over to their constituents. If this is the case, than we expect that there are more "Yes" votes on bonds and initiatives as compared to legislative proposals.

Proposition content also impacts the propensity of voters to cast votes and to vote "Yes" for a proposition. Dubin and Kalsow (1994a) find that voters tend to vote more often on issues that affect their daily lives, such as education, welfare, health, and taxes. They also find that people vote "Yes" more often on issues such as welfare and education. Although suggesting that voters will vote "Yes" less often on tax issues is consistent with "pocketbook voting," there are tax issues, such as those for cigarette and alcohol, that tend to be less related to a voter's checkbook than others such as property taxes. There are also tax issues such as proposition 163 in 1992 that repeal a tax on certain food products. As a result, it is difficult to predict the reaction of voters to tax issues in general.

The proposition characteristics also affect the propensity to vote and to vote "Yes." A proposition's reading ease and number of English words are positively and negatively related, respectively, to proposition voting (Dubin and Kalsow (1994a)). Based on our previous work we also anticipate that voting "Yes" will be positively related to reading ease and negatively related to the number of English words in the official ballot description

[13]California law requires signatures from registered voters to place an initiative on the ballot. The number of signatures ranges from at least five percent of the number of ballots cast in the last gubernatorial election for statutes to eight percent of the same number for constitutional amendments.

(Dubin and Kalsow (1994a)).

The individual-specific variables that have been considered in prior studies include race, socioeconomic, and social connectedness factors. Their impact on voting and voting "Yes" on propositions varies. We anticipate a negative relationship with voting and the percentage of African-Americans (Vanderleeuw and Engstrom (1987)), a negative relationship with income (Dubin and Kalsow (1994b)), a negative relationship with education (Wolfinger and Rosenstone (1980)), and a positive relationship with homeownership (Dubin and Kalsow (1994b)). In addition, we expect that African-Americans will vote "Yes" more often, as will those with higher incomes and lower levels of education. A negative relationship between voting "Yes" and homeownership would be consistent with our prior work.[14]

6 Hypotheses

The affect of the voting method (absentee or precinct), proposition form, content, and ballot characteristics on voting and voting "Yes" are the primary focus of this study. In this section we provide hypotheses for each of these variables as they relate to our analysis of proposition voting. In addition, we briefly discuss the impact of demographic factors and party affiliation that may be specific to absentee voters.

Since we know that absentee voters complete less of the ballot than their precinct voting counterparts, we anticipate a negative relationship between voting on propositions and absentee voting (Dubin and Kalsow (1994a)). Whether absentees actually voted "Yes" more or less often in the 1992 election depends on the specific propositions.[15] For example, if the election were to contain propositions that are conservative or pro-business, then one might expect a positive relationship between absentees and voting "Yes." This would follow if absentee voters are more conservative than precinct voters, as Cook (1991) and Willis (1994) suggest. However, the correlation at the election level depends on the composition of the entire slate of propositions.

At this point it is difficult to predict any relationship between either voting or voting "Yes" on a proposition with the proposition's form or content. Since the press attributes absentees with conservative tendencies, we might expect propositions that impose direct costs on taxpayers to receive fewer "Yes" votes by absentees. Of course, this expectation implies that absentees "suffer" from a more severe case of "pocketbook voting" than do their precinct voting counterparts. The tendency to vote "No" more often would

[14]For a complete discussion of the effects of race and socioeconomic factors on proposition voting see Dubin and Kalsow (1994a).

[15]This analysis is conditional on the decision to vote absentee or at the precinct. Given that choice, the next decisions of whether or not to vote on a proposition and to vote "Yes" versus "No" are temporally separate. One could also examine the decision by individuals to cast absentee ballots using this dataset. However, given the level of demographics that can be matched to absentee ballots our previous county level time-series cross section model of absentee voting provided a better analysis of that decision. See Dubin and Kalsow (1995).

be extended to bonds in general (proposition form) and any other propositions with potential costs, i.e., those related to taxes (proposition content).

If voters select their method of voting based on an opportunity cost of time model, and if absentee voting is more convenient, then we anticipate a negative relationship between the number of English words and voting on propositions for absentees. It could also be argued that absentee voters can rely on their sample ballots and the election information sent to every registered voter in California. However, if absentee voters are truly rushed for time, the tendency to skip the propositions with the longest descriptions will outweigh any advantage of voting at home.

As far as the race, socioeconomic, and social connectedness factors are concerned, we do not hypothesize any difference in either voting or voting "Yes" between absentee and precinct voters. Prior theoretical and empirical work on absentees does not suggest any direction or significance for these relationships.

Although the popular press would project a positive relationship between absentees and Republican party support, Dubin and Kalsow (1995) find a lack of evidence for this supposition. As the relationship between Republican registration and absentee voting is not completely described by income, education, or race, party affiliation may impact the propensity to vote and vote "Yes."[16] If we follow the pattern of higher Republican turnout in elections down to the ballot level, then Republican party affiliation will be positively related to voting on propositions. However, as noted above with respect to the absentee variable, the statistical significance and direction of the relationship of voting "Yes" and party affiliation depends on the specific propositions on the ballot.

7 Results

The estimated proposition voting model is given in Table 2. To analyze the effects of proposition form and content for absentee voters as compared to precinct voters we have constructed a series of hypotheses tests based on the estimated model reported in Table 2. The results of the hypothesis tests for proposition form are summarized in Table 3 and those for proposition content are in Table 4.[17] Inspecting Table 3 we find that absentee voters cast fewer votes on bonds and initiatives than do precinct voters. (Refer to the rows labeled "BOND" and "INITIATIVE" and the column labeled "VOTE" in Table 3.) Both

[16] A regression of the log odds of Republican registration on the demographic variables accounts for approximately 46 percent of the variance.

[17] Note that Tables 3 and 4 summarize the results in Table 2 for absentee voters relative to precinct voters. For example, the effect of voting on a bond by precinct voter is measured by the coefficient of "Bond" as reported in Table 2. However, for an absentee voter, the effect of voting on a bond is the summation of the coefficients on the "Absentee," "Bond," and "Bond * Absentee" variables reported in Table 2. Table 3 provides a summary of the net effect ("Absentee" plus "Bond * Absentee" coefficients) and the statistical significance of that net effect. For example, in the row labeled "BOND" and the column labeled "VOTE," there is a negative sign, implying that absentee voters vote on bonds less often than do precinct voters, and this difference is statistically significant.

cells contain negative signs, demonstrating a decreased propensity for absentee voters to cast votes for these proposition types as compared to precinct voters. Similarly, the entry found in the row labeled "LEGISLATIVE PROPOSAL" and the column labeled "VOTE" contains a zero, implying that there is no distinguishable difference in the voting behavior between absentee and precinct voters for legislative proposals. The results summarized in Table 4 indicate that absentee voters also vote more frequently on tax related issues than do precinct voters, perhaps related to their higher incomes (Dubin and Kalsow (1995)). In addition, there does not appear to be any difference in the propensity to vote on "HUMAN" and "OTHER" propositions between absentee and precinct voters.

[Tables 2, 3, and 4 Here]

The results related to proposition characteristics, demographics, and party affiliation are also given in Table 2. As anticipated, the easier a proposition is to comprehend the more often people cast votes. Our hypothesis that absentee voters may be rushed and therefore unwilling to wade through long propositions is supported by the negative relationship between number of English words and voting for absentees. The Republican registration variable is positively related to voting on propositions. However, Republicans who use the absentee format are no more or less likely to vote for a proposition than are the precinct voting Republicans.

The estimates for the voting "Yes" model are given in Table 5. Tables 3 and 4 provide a summary of the results for proposition form and content on voting "Yes," under the column heading "VOTE YES." The "INITIATIVE" row in Table 4 shows that absentee voters support initiatives more often than do precinct voters. However, the other two rows indicate that absentee voters are more inclined to oppose bonds and legislative proposals than are their precinct voting counterparts. Absentee voters also seem to have benevolent tendencies when it comes to issues related to education, welfare, health care, and physician-assisted death. However, as the "TAXES" and "OTHER" rows indicate in Table 4, absentee voters consistently oppose taxes and other issues related to state government, toll roads, rail transit, and term limits.

[Table 5 Here]

The results regarding the reading ease and number of English words are consistent with our hypothesis. We find that the easier the proposition text is to read on the ballot, the more voters will support that proposition. In addition, the longer the description of the proposition, the more impatient the voter becomes, and the less support the proposition receives. One surprising result is that related to African-American absentees. Although we did not hypothesize any difference between African-American absentee voters and precinct voters, it appears that African-American absentee voters vote "No" more

often than do their precinct counterparts.[18] The results of the remaining demographic variables are similar to those obtained in Dubin and Kalsow (1994a). Since the previous Dubin and Kalsow study was not an analysis specific to 1992, we find evidence that our current results are not specialized to this specific election.

8 Discussion and Conclusion

Clearly the form and content of propositions do matter when a precinct or an absentee voter is considering her option to cast a vote and whether to cast a "Yes" or "No" vote. If absentee and precinct voting are substitute activities in general elections (Dubin and Kalsow (1995)), albeit not perfect substitutes, then some individuals are simply changing their mode of voting while others are becoming voters. In addition to the changes in the composition of the electorate, however, there appears to be shifts in the typical voter's behavior when they vote absentee as compared to voting at the precinct. Thus the switch from precinct to absentee voting is not as innocuous as it first appears. The representativeness of an election is affected not only by the composition of the electorate, but also by their behavior. While the supporters of liberalizing absentee laws have claimed that it would increase the number of voters, it does not appear to have done so. Moreover, participation has in fact decreased if one counts the number of propositions on the ballot that receive notice by voters.

An important conclusion from our study is related to the conventional wisdom regarding voters and non-voters. If voters and non-voters have similar demographics and political attitudes, and if this pattern extends to absentee and precinct voters, then we would not expect any difference in direct legislation voting based on those factors. Our research supports this notion as we do not find any differences in absentee and precinct voters' propensity to vote or vote "Yes" based upon education, income, race, homeownership, or party affiliation.

We could speculate what would have happened without the liberalization of absentee voting laws, but a more useful exercise is to investigate who will now benefit from the legislative change. If the number of absentee voters continues to increase and if they maintain the apparent differences in voting behavior that we have found, then it may be incumbent upon interest groups and other proposition campaign groups to examine the voting behavior of absentees. If it is feasible to identify potential supporters for certain propositions and if interest groups have the fiscal resources, then they have the opportunity to join the "get out the absentee vote" movement. Both proposition supporters and opposition groups could begin to encourage absentee voting either by independent efforts or in an alliance with a larger partisan candidate effort.

To date we have found that the representativeness of proposition outcomes may be affected by the extent of absentee voting. If absentee voters are more conservative and

[18]Since the effect of the other socioeconomic factors we examined did not differ between absentee and precinct voters, we tend to discount this result and regard it as plausibly spurious.

have higher incomes and educational levels, combined with the fact that they behave differently when voting on propositions, then election outcomes may be different than they would have been without the liberalization of absentee laws. Since ballot completion can also be considered as a stage in a political participation model, the ability to cast an absentee ballot may have actually decreased participation.

Further research is required to determine the impact of absentee voters on partisan and non-partisan candidate races. Additionally, in recent years Californians have begun employing opposing or strategic propositions as a method for defeating other propositions. This situation leads to an opportunity for voters to vote either sincerely or strategically. Because absentee voters are voting in the comfort of their homes their ability to sort through such competing propositions may be different than that of precinct voters. The patterns of voting on competing propositions should be examined in light of differences in voting behavior between absentee and precinct voters.

Table 1: INDEPENDENT VARIABLES

VARIABLE	DEFINITION
Absentee	Indicator for absentee voters.
Proposition Form	
Bond	Indicator for bonds.
Initiative	Indicator for initiatives.
Proposition Content	
Humanitarian	Indicator for propositions whose content deals with education, health, welfare, or physician-assisted death.
Taxes	Indicator for propositions whose content deals with state taxes, food taxes, or property taxes.
Proposition Characteristics	
Reading Ease	Flesch index score for the proposition's official ballot description (divided by 100).
English Words	Word count of the English version of the proposition's official ballot description (divided by 100).
Demographics	
African-American	% of population reporting African-American.
Median Income (0000's)	Median family income in 1989.
Low Education	% of population over age 25 not completing high school.
Homeownership	% of households residing in owner-occupied homes.
Party Affiliation	
Republican	% of registered voters that are Republican.

Table 2: PROPENSITY TO VOTE

VARIABLE	ESTIMATED COEFFICIENT		T-STATISTIC
Constant	1.763	***	5.98
Absentee	-0.148		-1.25
Proposition Form			
Bond	0.187	***	3.67
Bond * Absentee	-0.112	*	-1.65
Initiative	0.190	***	4.13
Initiative * Absentee	0.131	**	2.39
Proposition Content			
Humanitarian	0.453	***	14.56
Taxes	0.237	***	6.86
Taxes * Absentee	0.092	**	1.99
Proposition Characteristics			
Reading Ease	0.605	***	7.00
English Words	0.344	**	1.87
English Words * Absentee	-0.643	***	-2.73
Demographics			
African-American	-0.263		-1.51
Median Income	-0.124	***	-3.08
Low Education	-0.865	***	-2.67
Homeownership	0.505	***	3.58
Party Affiliation			
Republican	0.755	***	3.17
Log Likelihood – Initial			-90443
Log Likelihood – Convergence			-44543
Number of Observations			130481

Note: *p=.10, **p=.05, ***p=.01

Table 3: EFFECT OF PROPOSITION FORM ON ABSENTEE VOTERS

PROPOSITION FORM	VOTE	VOTE YES
BOND	–	–
LEGISLATIVE PROPOSAL	0	–
INITIATIVE	–	+

Note: "+" represents an increased propensity for absentee voters to perform the specified task. A "–" implies a decreased propensity for absentee voters to perform the specified task. A zero, "0", indicates no statistically significant effect. These measurements are made relative to the group of precinct voters.

Table 4: EFFECT OF PROPOSITION CONTENT ON ABSENTEE VOTERS

PROPOSITION CONTENT	VOTE	VOTE YES
HUMAN: EDUC., WELFARE, HEALTH	0	+
TAXES: STATE, PROPERTY, FOOD	+	–
OTHER	0	–

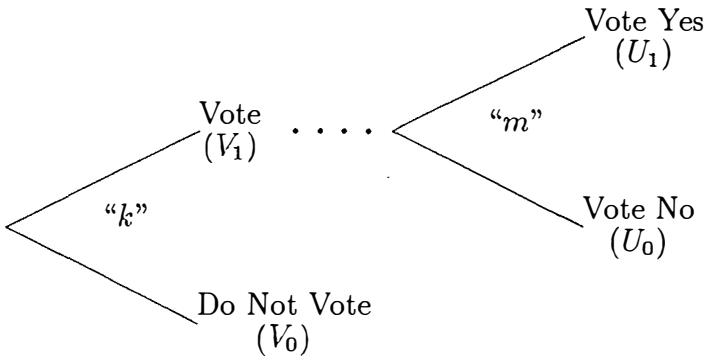
Note: "+" represent and increased propensity for absentee voters to perform the specified task. A "–" implies a decreased propensity to perform the specified task. A zero, "0", indicates no statistically significant effect. These measurements are made relative to the group of precinct voters.

Table 5: PROPENSITY TO VOTE YES CONDITIONAL ON VOTING

VARIABLE	ESTIMATED COEFFICIENT		T-STATISTIC
Constant	1.138	***	5.06
Absentee	-0.118	***	-4.54
Proposition Form			
Bond	0.102	***	2.90
Bond * Absentee	-0.226	***	-5.50
Initiative	0.998	***	31.38
Initiative * Absentee	0.309	***	9.90
Proposition Content			
Humanitarian	-0.560	***	-23.30
Humanitarian * Absentee	0.171	***	5.38
Taxes	0.477	***	20.35
Taxes * Absentee	-0.096	***	-2.98
Proposition Characteristics			
Reading Ease	0.402	***	6.53
English Words	-3.579	***	-30.33
Demographics			
African-American	0.507	***	3.86
African-American*Absentee	-0.374	***	3.77
Median Income (000's)	0.087	***	2.86
Low Education	0.396		1.56
Homeownership	-0.457	***	-4.35
Party Affiliation			
Republican	-0.354	**	-1.98
Log Likelihood – Initial			-79918
Log Likelihood – Convergence			-77885
Number of Observations			113359

Note: *p=.10, **p=.05, ***p=.01

Figure 1: Model of Proposition Voting



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